

**What is claimed is:**

1           1.    A method for creating a vector representation of a  
2 image, the method comprising the steps of:  
3           acquiring position information for two nodes of the  
4           image from user input;  
5           determining a curve sketching a segment of an outline  
6           of the image between the two nodes;  
7           acquiring position information of a new node on the  
8           image from additional user input;  
9           determining another curve sketching another segment of  
10          the outline of the image between the new node and  
11          the node where the previous curve ends; and  
12          repeating the determination step until the outline of  
13          the image is completely sketched.

1           2.    The method as claimed in claim 1, wherein the  
2 image is a bitmap image.

1           3.    The method as claimed in claim 1, wherein the  
2 curve sketching one segment of the outline of the image  
3 between two of the nodes acquired from user input is  
4 determined by the steps of:  
5           determining a vector flow of the image between the two  
6           nodes by a tracing algorithm to extract a number  
7           of sample points;  
8           determining a function describing the sample points by  
9           a curve-fitting algorithm; and  
10          adopting the function to one describing a cubic Bezier  
11          curve.

1           4.    The method as claimed in claim 3, wherein the  
2    curve-fitting algorithm is Simple Curve Fitting algorithm.

1           5.    The method as claimed in claim 1 further  
2    comprising smoothing joints of the curves sketching the  
3    outline of the image.

1           6.    An apparatus for creating a vector representation  
2    of a image, the apparatus comprising:  
3           means for acquiring position information for pairs of  
4           nodes of the image from user input; and  
5           means for determining a curve sketching a segment of an  
6           outline of the image between each pair of nodes.

1           7.    The apparatus as claimed in claim 6, wherein the  
2    image is a bitmap image.

1           8.    The apparatus as claimed in claim 6, wherein the  
2    curve determining means comprises:  
3           means for determining a vector flow of the image  
4           between the two nodes by a tracing algorithm to  
5           extract a number of sample points;  
6           means for determining a function describing the sample  
7           points by a curve-fitting algorithm; and  
8           means for adopting the function to one describing a  
9           cubic Bezier curve.

1           9.    The apparatus as claimed in claim 8, wherein the  
2    curve-fitting algorithm is Simple Curve Fitting algorithm.

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10. The apparatus as claimed in claim 6 further comprising means for smoothing joints of the curves sketching the outline of the image.